

Montana Department of Natural Resources and Conservation Water Resources Division Water Rights Bureau
ENVIRONMENTAL ASSESSMENT For Routine Actions with Limited Environmental Impact

Part I. Proposed Action Description

1. *Applicant/Contact name and address:* City of Cut Bank
Robert A. Smith, City Attorney
P.O. Box 547
Cut Bank, MT 59427
2. *Type of action:* Application to Change Water Reservation Water Right No. 41L-72578-00
3. *Water source name:* Cut Bank Creek
4. *Location affected by project:* The proposed offstream storage reservoir will be located in the W1/2SE1/4SW1/4 of Sec. 2, T33N, R6W, Glacier County.
5. *Narrative summary of the proposed project, purpose, action to be taken, and benefits:*

The applicant proposes the construction of an offstream sedimentation and storage reservoir. The proposed reservoir will consist of a maximum normal storage volume of 87.3 acre-feet. The stated approximate pond surface area at normal maximum fill is 7.33 acres. The volume was determined by the city's project engineer utilizing parabolic formulas to calculate the reservoir volume. The project engineering schematics show the elevation to be 3691asl at the bottom of the reservoir and 3705asl at normal fill for a total operating depth of 14 feet. The purpose of the proposed project is to change the location of the offstream reservoir filed under water reservation #41L 72578-00. The beneficial use as stated on their water reservation will be for municipal water supply for the City of Cut Bank at a flow rate of 1.42 cfs up to 400 acre feet per year. The stated purpose is to enhance the efficiency and capacity of the city's municipal water system. The place of use is to remain the same as initially granted under the city's water reservation #41L-72578-00.

The DNRC shall issue an authorization to change if the applicant proves the criteria in 85-2-402, MCA, are met.

6. *Agencies consulted during preparation of the Environmental Assessment:*
(include agencies with overlapping jurisdiction)
Montana Natural Heritage Program

Montana State Historic Preservation Office
Natural Resources Conservation Service (NRCS) Soils Data Website

Dept. of Environmental Quality Website (TMDL 303d listing)
MT Dept. of Fish, Wildlife & Parks Website (Montana Rivers Information System)
National Wetlands Inventory Website

Part II. Environmental Review

1. Environmental Impact Checklist:

PHYSICAL ENVIRONMENT

WATER QUANTITY, QUALITY AND DISTRIBUTION

Water quantity - Assess whether the source of supply is identified as a chronically or periodically dewatered stream by DFWP. Assess whether the proposed use will worsen the already dewatered condition.

Determination: Cut Bank Creek is considered as a periodically dewatered stream by the Dept. of Fish, Wildlife, and Parks (DFWP) from mile 0.0 to river mile (rm) 17.0. The Dept. of Fish, Wildlife and Parks has a water reservation granted on Cut Bank Creek from the headwater point to rm 22.9 which is in the same portion of the creek as the dewatered stream section mentioned above. The water reservation flow rate is stated as 1.42 CFS from January 1 to December 3. This is a change in the location of the storage reservoir reserved for the City of Cut Bank #41L-72578-00. The DFWP water reservation information below is for informational purposes only.

***From (rm 0.0) to (rm 22.9) to BIG ROCK
COULEE***

<i>Begin</i>	<i>End</i>	<i>Flow (CFS)</i>	<i>Priority Date</i>
<i>01/01</i>	<i>12/31</i>	<i>75</i>	<i>7/1/1985</i>

Water quality - Assess whether the stream is listed as water quality impaired or threatened by DEQ, and whether the proposed project will affect water quality.

Determination: Cut Bank Creek from the Blackfeet Reservation boundary to the Marias River has been listed by the Montana Department of Environmental Quality (MDEQ) on the 2006 TMDL 303(d) list as a Water Quality Category 5. The 2006 303(d) lists one or more uses are impaired and a TMDL is required. On the 2006 list, the source is listed for beneficial use as fully supporting for agriculture, drinking water, and industrial uses. Not supported for beneficial uses that are listed are aquatic life, cold water fishery, and primary contact recreation. No assessment report was completed by MDEQ in 2002. The rate of diversion and volume of water is already granted and accounted for under water reservation #41L-72578-00, priority date July 01, 1985.

Groundwater - Assess if the proposed project impacts ground water quality or supply. If this is a groundwater appropriation, assess if it could impact adjacent surface water flows.

Determination: The proposed storage and sedimentation reservoir project includes plans for a 36 mil reinforced polypropylene liner to be installed to seal the reservoir from any water loss through the ground. Where the proposed project is associated with a water reservation, no historical data is available to assess any positive or negative impacts to groundwater resources.

DIVERSION WORKS - Assess whether the means of diversion, construction and operation of the appropriation works of the proposed project will impact any of the following: channel impacts, flow modifications, barriers, riparian areas, dams, well construction.

Determination: The point of diversion works consist of an infiltration gallery 75' long and 24' wide located underneath the stream bed with only the rock filled Gabion baskets and Reno rock filled mattress exposed to the stream flow. The infiltration gallery intake lines are joined in manifold to supply water to the pumping station wet well. The stated operation of the system is to alternate diversion flow between six intake screens with each of the screens coupled to 12" PVC pipe running in series and connected to three 18" PVC pipelines that gravity feeds water to a wet well or directly to the water treatment plant depending on demand. The infiltration gallery also includes an air system to backflush debris and sedimentation from the gallery. Three low lift 825 gpm Fairbanks Morse two stage turbine pumps, each driven by 40 bhp electric motors will supply flow to the delivery systems of both the city's water treatment plant and the proposed storage reservoir. Disturbance to the stream bed during construction and operation of the diversion works are not expected to create any significant impact.

UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES

Endangered and threatened species - Assess whether the proposed project will impact any threatened or endangered fish, wildlife, plants or aquatic species or any "species of special concern," or create a barrier to the migration or movement of fish or wildlife. For groundwater, assess whether the proposed project, including impacts on adjacent surface flows, would impact any threatened or endangered species or "species of special concern."

Determination: According to a report from the Montana Natural Heritage program, there is no record of species of concern in the vicinity of the proposed project in Section 02, T33N, R06W, Glacier County. No impact is anticipated from this project.

Wetlands - *Consult and assess whether the apparent wetland is a functional wetland (according to COE definitions), and whether the wetland resource would be impacted.*

Determination: No known wetlands exist in the project area according to the National Wetlands Inventory.

Ponds - *For ponds, consult and assess whether existing wildlife, waterfowl, or fisheries resources would be impacted.*

Determination: The proposed 87.3 acre-foot off stream reservoir will be located approximately 2000 feet to the west of the point of diversion stated on the city's water reservation. This reservoir will be filled from the source through a gravel and synthetic screened infiltration gallery, thus fisheries resources should not be impacted. Also, Montana Department of Environmental Quality TMDL 303(d) list notes that the source is not listed as supporting aquatic life or a cold water fishery. The reservoir site perimeter is enclosed with a 7 feet tall chain link fence with an additional 1 foot of 3 strand barbwire. Due to the design, construction and location of the project, little significant impact is anticipated.

GEOLOGY/SOIL QUALITY, STABILITY AND MOISTURE - *Assess whether there will be degradation of soil quality, alteration of soil stability, or moisture content. Assess whether the soils are heavy in salts that could cause saline seep.*

Determination: Data from the NRCS interactive soils map website indicate that the proposed reservoir contains two predominant soil types. These two types are Beaverton gravelly loam typically found on 2-4% slopes and Linnet clay with a gravelly substratum, also typically found on 2-4% slopes. Both of these soil types are rated by the NRCS as very limited for the purpose of a pond or reservoir. As per application, construction is to include a synthetic liner encompassing the entire proposed reservoir. The proposed point of diversion infiltration gallery site contains one type. The type is identified as Sunburst clay. The NRCS rating on this soils class for hydrologic qualities is a Class C. This is defined as having a slow infiltration rate when thoroughly wet. These consist mostly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture. These soils have a slow rate of water transmission. None of the soil types were listed as containing salts or noted as contributing to saline seepage. Due to the design and operation of the project, there is little impact anticipated.

VEGETATION COVER, QUANTITY AND QUALITY/NOXIOUS WEEDS - *Assess impacts to existing vegetative cover. Assess whether the proposed project would result in the establishment or spread of noxious weeds.*

Determination: There will be some stream bank disturbance during the construction process as designed by the project engineers. The current Cut Bank Creek banks are currently in native vegetation. The infiltration gallery and reservoir design should not have a significant impact to existing vegetative cover. However it is the applicant's responsibility to control noxious weeds on their property.

AIR QUALITY - *Assess whether there will be a deterioration of air quality or adverse effects on vegetation due to increased air pollutants.*

Determination: No impacts to air quality will occur as a result of this project.

HISTORICAL AND ARCHEOLOGICAL SITES - *Assess whether there will be degradation of unique archeological or historical sites in the vicinity of the proposed project.*

Determination: According to the Montana State Historical Society (Society), there have been two previously recorded sites within the designated search location, a paleontological site and a historical railroad site. The Society stated that the reservoir project has the potential to impact cultural properties and recommended that a cultural resource survey be completed to determine whether or not sites exist and if they will be impacted. Due to the ground disturbance involved with the project, significant impact may be involved. The State Historic Preservation Society office should be consulted.

DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AND ENERGY - *Assess any other impacts on environmental resources of land, water and energy not already addressed.*

Determination: No additional impacts on other environmental resources were identified.

HUMAN ENVIRONMENT

LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS - *Assess whether the proposed project is inconsistent with any locally adopted environmental plans and goals.*

Determination: There are no known environmental plans or goals in this area.

ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES - *Assess whether the proposed project will impact access to or the quality of recreational and wilderness activities.*

Determination: The project should have no significant or harmful impact on recreational or wilderness activities.

HUMAN HEALTH - *Assess whether the proposed project impacts on human health.*

Determination: The project should have no impact on human health.

PRIVATE PROPERTY - Assess whether there are any government regulatory impacts on private property rights.

Yes___ No x If yes, analyze any alternatives considered that could reduce, minimize, or eliminate the regulation of private property rights.

Determination: This application is for the City of Cut Bank, an incorporated municipality. No adverse effect on private property rights is anticipated from this project.

OTHER HUMAN ENVIRONMENTAL ISSUES - For routine actions of limited environmental impact, the following may be addressed in a checklist fashion.

Impacts on:

- (a) Cultural uniqueness and diversity? No significant impact.
- (b) Local and state tax base and tax revenues? No significant impact.
- (c) Existing land uses? No significant impact.
- (d) Quantity and distribution of employment? No significant impact.
- (e) Distribution and density of population and housing? No significant impact.
- (f) Demands for government services? No significant impact.
- (g) Industrial and commercial activity? No significant impact.
- (h) Utilities? No significant impact.
- (i) Transportation? No significant impact.
- (j) Safety? No significant impact.
- (k) Other appropriate social and economic circumstances? No significant impact.

2. *Secondary and cumulative impacts on the physical environment and human population:*

Secondary Impacts? No secondary impacts have been identified.

Cumulative Impacts? No cumulative impacts have been identified.

3. *Describe any mitigation/stipulation measures:* None

4. ***Description and analysis of reasonable alternatives to the proposed action, including the no action alternative, if an alternative is reasonably available and prudent to consider:***

No action alternative:

The applicant would not have the benefit of actively storing water during low stream flow periods, municipality demand fluctuations along with the removal of water sedimentation during times of high stream turbidity. The applicant would have to continue to manage municipal water demands without the previously stated benefits.

Alternative 1:

Approve the change application as submitted if the applicant proves the criteria is met.

PART III. Conclusion

1. ***Preferred Alternative:*** Alternative 1.

2. ***Comments and Responses:*** None

3. ***Finding:***

Yes___ No **X** Based on the significance criteria evaluated in this EA, is an EIS required?

If an EIS is not required, explain why the EA is the appropriate level of analysis for this proposed action: No significant impacts have been identified, therefore an EIS is not necessary.

Name of person(s) responsible for preparation of EA:

Name: Matt Miles

Title: Water Resources Specialist

Date: 04/13/2007